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1. A portable distance tracking system for use by a player on a playing field, wherein said playing field includes at least a first landmark, and wherein said system comprises at least one mobile interface unit including:

A. a memory element including means for storing digitized map representations of at least one said playing field;

B. position interface electronics including means for receiving position indicative signals from an external source wherein said position indicative signals are representative of a geographical location of said mobile interface unit;

C. a data processor, coupled to said memory element and to said position interface electronics, and including means for corresponding said geographical location of said mobile interface unit with said digitized map representation of said playing field to determine a field location of said mobile interface unit on said playing field, and means for determining a distance between said mobile interface unit and said first landmark; and

D. a player interface, coupled to said data processor, and including means for communicating at least said distance between said mobile interface unit and said landmark to said player.

2. A portable distance tracking system according to claim 1 wherein said external source is a Global Positioning System satellite constellation located in orbit around the Earth, said position interface electronics includes a first GPS receiver for receiving said position indicative signals from said Global Positioning System satellite constellation, and a first GPS processor having means for processing said position indicative signals to determine said geographical location of said mobile interface unit.

3. A portable distance tracking system according to claim 2 wherein said system further comprises a GPS master unit, wherein said GPS master unit is positioned at a fixed location having known longitude and latitude coordinates and includes:

A. a second GPS receiver for receiving said position indicative signals from said Global Positioning System satellite constellation, and a second GPS processor having means for processing said position indicative signals to determine a calculated longitude and a calculated latitude for said fixed location of said GPS master unit;

B. wireless transmission means for transmitting an error correction signal to said mobile interface unit, wherein said error correction signal is based at least in part on a difference between said known longitude and latitude and said calculated longitude and latitude, and

C. wireless reception means for receiving said error correction signal from said GPS master unit, and said first GPS processor includes means for processing said error correction signal with said position indicative signals to determine a corrected geographical position of said mobile interface unit.

4. A portable distance tracking system according to claim 1 wherein said playing field is a golf course, said mobile interface unit is adaptable for mounting on a wheeled golf cart, said external source includes means for providing an initialization signal representative of an initial position of said wheeled golf cart and means for generating an electronic signal representative of revolutions of a wheel of said golf cart, and wherein said position interface electronics includes a compass for generating an electronic signal representative of direction of travel of said golf cart and said data processor includes means for determining said field position from at least in part said initial position of said cart, said electronic signal from said compass and said electronic signal from said external source.

5. A portable distance tracking system according to claim 2 wherein said memory element includes a replaceable portion, said replaceable portion being capable of storing digitized map representations of different playing fields, thus enabling a player to use said mobile interface unit at a plurality of playing fields.

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a 6. A portable distance tracking system according to claim 2 wherein said mobile interface unit further comprises a keyboard interface coupled to said data processor and including means for entering commands and data into said mobile interface unit.

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7. A portable distance tracking system according to claim 2 wherein said player interface includes a visual display including means for displaying information to a player.

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8. A portable distance tracking system according to claim 2 wherein said player interface includes an audio interface for communicating information to a player.

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a 7  
9. A portable distance tracking system according to claim 2 wherein said at least one playing field is a golf course, said mobile interface unit further comprises a player audio/visual interface having a keyboard interface coupled to said data processor and

including means for entering commands and data into said mobile interface unit, and a visual display interface having means for displaying entered commands and data.

10. A portable distance tracking system according to claim 9 wherein said keyboard interface includes means for selecting a particular golf course to be played by signaling said processor to access said digitized map representation for said particular golf course from said memory element.

11. A portable distance tracking system according to claim 9 wherein said memory element includes means for storing a plurality of said digitized map representations and said system includes means for processing said position indicative signals to automatically determine which particular golf course a golfer has selected to play, said processor includes means for accessing said digitized map representation for said particular golf course in response to said determination, and said display includes means for displaying an identification code associated with said particular golf course.

12. A portable distance tracking system according to claim 9 wherein said keyboard interface includes means for selecting a particular hole to be played on said golf course.

13. A portable distance tracking system according to claim 9 wherein said system includes means for processing said position indicative signals to determine which particular hole on said golf course a golfer has selected to play.

14. A portable distance tracking system according to claim 9 wherein said display includes means for displaying a par score associated with a selected hole to be played on said golf course.

15. A portable distance tracking system according to claim 9 wherein said display includes means for displaying a handicap associated with a selected hole to be played on said golf course.

16. A portable distance tracking system according to claim 9 wherein a particular hole has an associated flag location, said first landmark is said associated flag location, and said display includes means for displaying a distance between said mobile interface unit and said first landmark.

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A portable distance tracking system according to claim <sup>8</sup>9 wherein a particular hole has a plurality of associated landmarks and said display includes means for displaying a distance between said mobile interface unit and one or more of said landmarks.

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A portable distance tracking system according to claim <sup>14</sup>17 wherein said keyboard includes means for signaling said display to display a distance between said mobile interface unit and one or more of said landmarks.

16 19.

A portable distance tracking system according to claim <sup>8</sup>9 wherein said display includes means for displaying a graphical representation of a particular hole selected ~~hole~~ to be played on said golf course.

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A portable distance tracking system according to claim <sup>16</sup>19 wherein said particular hole has a plurality of associated landmarks and said graphical representation shows said location of said mobile interface unit in relation to one or more of said landmarks, and said mobile interface unit includes means for displaying a distance between said mobile interface unit and one or more of said landmarks.

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A portable distance tracking system according to claim <sup>8</sup>9 wherein said system includes means for processing said position indicative signals to automatically determine which particular hole on said <sup>particular</sup> golf course a golfer has selected to play, and said display includes means for displaying a graphical representation of at least a portion of said particular hole.

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A portable distance tracking system according to claim <sup>8</sup>9 wherein said system includes means for dynamically updating said displayed portion of said particular hole in dependence on said field <sup>location</sup> ~~position~~ of said mobile interface unit.

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A portable distance tracking system according to claim <sup>8</sup>9 wherein said memory includes means for storing nominal distance assignments for golf clubs, wherein said assignments are representative of how far a golfer nominally hits a golf ball with a particular golf club, and said keyboard interface includes means for enabling a player to signal said data processor to modify one or more of said nominal distance assignments.

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A portable distance tracking system according to claim <sup>20</sup>23 wherein said data processor includes means for determining a suggested golf club selection based at least in part on said distance assignments and said distance between said mobile interface unit and said first landmark, and said display includes means for displaying said suggested golf club selection.

<sup>22</sup>  
~~25.~~ A portable distance tracking system according to claim <sup>21</sup>~~24~~ wherein said keyboard includes means for overriding said suggested golf club selection by entering an alternative golf club choice.

<sup>23</sup>  
~~26.~~ A portable distance tracking system according to claim <sup>22</sup>~~25~~ wherein said data processor includes means for automatically updating said nominal distance assignments, based at least in part on said entering said alternative golf club choice.

<sup>24</sup>  
~~27.~~ A portable distance tracking system according to claim <sup>21</sup>~~24~~ wherein said keyboard includes means for entering an actual distance that said golfer hit with said suggested golf club selection.

<sup>25</sup>  
~~28.~~ A portable distance tracking system according to claim <sup>24</sup>~~27~~ wherein said data processor includes means for automatically updating said nominal distance assignments, based at least in part on said entering said actual distance.

<sup>26</sup>  
~~29.~~ A portable distance tracking system according to claim <sup>8 particular</sup>~~9~~ wherein said golf course includes a plurality of holes to be played and said keyboard includes means for entering a hole score achieved by a golfer on said holes, said display includes means for displaying at least one of said hole scores at any particular time, said memory element includes means for storing said hole scores, and said processor element includes means for tallying said hole scores to determine a current total score equal to the sum of the scores of all holes thus far played.

<sup>27</sup>  
~~30.~~ A portable distance tracking system according to claim <sup>8</sup>~~9~~ wherein said keyboard includes means for entering number of putts taken on each of said holes and said memory element includes means for storing said number of putts.

<sup>28</sup>  
~~31.~~ A portable distance tracking system according to claim <sup>8</sup>~~9~~ wherein said keyboard includes means for selecting a particular number of golfers to share said mobile interface unit, said data processor includes means for associating an identification code with each of said number of golfers, and said display includes means for displaying at least one of said identification codes at any particular time.

<sup>29</sup>  
~~32.~~ A portable distance tracking system according to claim <sup>8</sup>~~9~~ wherein said memory includes means for storing information regarding at least one round of golf on said <sup>particular</sup> golf course, said keyboard includes means for signaling said processor to recall said information from said memory, and said display includes mean for displaying said

information, wherein said information includes at least one of total score, score on particular holes, clubs selected for particular shots, penalties taken on particular holes, putts taken on particular holes, and distances hit with particular golf clubs.

<sup>30</sup>  
~~33.~~ A portable distance tracking system according to claim <sup>8</sup>~~9~~ wherein said mobile interface unit includes a communications interface having means for transferring digital information to and from said memory, wherein said system further includes a central computer including means for interfacing with said communication interface to transfer digital information between said mobile interface unit and said central computer.

<sup>31</sup>  
~~34.~~ A portable distance tracking system according to claim <sup>30</sup>~~33~~ wherein said central computer includes means for updating said digitized map information stored in said mobile interface unit memory to reflect current golf course conditions.

<sup>32</sup>  
~~35.~~ A portable distance tracking system according to claim <sup>30</sup>~~33~~ wherein said mobile interface unit memory includes means for storing information regarding at least one round of golf on said golf course, said keyboard includes means for signaling said processor to recall said information from said memory, and said display includes <sup>means</sup>~~mean~~ for displaying said information, wherein said information includes at least one of total score, score on particular holes, clubs selected for particular shots, penalties taken on particular holes, putts taken on particular holes, and distances hit with particular golf clubs, and said central computer includes means for downloading said information, means for processing said information, means for storing said information, and means for printing said information in at least one of processed or unprocessed form.

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~~36.~~ A system for determining the distance to a hole on a golf course, comprising:  
(A) GPS receiver means arranged to receive a global earth position;  
(B) processing means in communication with said GPS receiver means, comprising  
i) memory means for storing a first location representing at least one hole of said golf course, and  
ii) correlation means for correlating said global earth position to said location wherein the distance from said global earth position to said location is determined.

<sup>34</sup>  
~~37.~~ A system according to claim <sup>33</sup>~~36~~ further comprising indication means for indicating said distance to a user of said system.

<sup>35</sup>  
~~38.~~ A system according to claim <sup>34</sup>~~37~~ wherein said indication means is <sup>a liquid crystal</sup>~~an LCD~~ display.

Sub 010/ 39. A system according to claim 36 wherein said GPS receiver means is a differential GPS receiver having means for receiving and applying a correction signal, and further comprising stationary differential GPS receiver/transmitter means arranged at a known global earth location geographically located with said golf course, said stationary GPS receiver/transmitter means operating in conjunction with, and transmitting said correction signal to, said differential GPS receiver means.

40. A system according to claim 36 wherein said memory means further comprises means for storing a second location of at least one object on said golf course and wherein said correlation means further comprises means for correlating said global earth position to said second location such that the distance between said global earth position and said second location is determined.

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41. A system according to claim 36 wherein said processing means further comprises memory load means for communicating coordinates representative of at least one location of said golf course to said memory means.

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42. A system according to claim 41 further comprising local memory storage means for storing coordinates representative of said golf course, said memory load means being adaptable for selective communication with said local memory storage means wherein said memory load means communicates said coordinates representative of said golf course to said memory means for storage in said memory means.

43. A system for determining the distance to a hole on a golf course, comprising:  
(A) GPS receiver means arranged to receive a global earth position;  
(B) processing means in communication with said GPS receiver means,  
comprising  
i) memory means for storing a location of at least one hole of said golf course,  
and  
ii) correlation means for correlating said global earth position to said location,  
wherein the distance from said global earth position to said location is determined.

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